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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,563	09/12/2000	Gregory L. Slaughter	5181-64900	6903

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EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/660,563	SLAUGHTER ET AL.	
	Examiner	Art Unit	
	Victor Lesniewski	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 8/2/2006 has been placed of record in the file.
2. In response to the Examiner's Answer dated 5/30/2006 which presented a new ground of rejection, the appellant has filed a reply in compliance with 37 CFR 1.111. Thereby, prosecution is reopened and the reply has been entered and considered.
3. Claims 21-30 have been amended.
4. The rejection of claims 21-30 under 35 U.S.C. 101 is withdrawn in view of the amendment.
5. Claims 1-30 are now pending.
6. The applicant's arguments with respect to claims 1-30 have been fully considered but they are not persuasive. A detailed discussion is set forth below.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-5, 7-15, 17-25, and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Beck et al. (U.S. Patent Number 6,604,140), hereinafter referred to as Beck.

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9. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a system or a carrier medium are rejected under the same rationale applied to the described claim.

10. Beck has disclosed:

- <Claims 1, 11, and 21>

A method comprising: a client reading an advertisement from a space, wherein the space comprises a network-addressable storage location (column 6, lines 1-16), wherein the advertisement comprises a Uniform Resource Identifier (URI) and a schema, wherein the URI specifies a network address at which a service may be accessed, and wherein the schema specifies one or more messages usable to invoke one or more functions of the service (column 4, lines 40-60); and the client sending a first message to the service at the URI, wherein the first message is specified in the schema (column 6, lines 30-39).

- <Claims 2, 12, and 22>

The method of claim 1, further comprising: the service sending a second message to the client in response to the client sending the first message to the service, wherein the second message is specified in the schema (column 6, lines 41-44).

- <Claims 3, 13, and 23>

The method of claim 1, further comprising: invoking one or more functions of the service in response to the client sending the first message to the service (column 6, lines 39-41).

- <Claims 4, 14, and 24>

The method of claim 1, wherein the schema is expressed in a data representation language (column 5, lines 46-50).

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- <Claims 5, 15, and 25>

The method of claim 1, wherein the first message is expressed in a data representation language (column 5, lines 54-61 and column 6, lines 30-39).

- <Claims 7, 17, and 27>

The method of claim 1, wherein the URI comprises an Internet address (column 4, lines 50-51).

- <Claims 8, 18, and 28>

The method of claim 1, further comprising: the service publishing the advertisement in the space (column 4, lines 31-39).

- <Claims 9, 19, and 29>

The method of claim 1, further comprising: the client using a lookup service to find the advertisement in the space (column 5, lines 65-67).

- <Claims 10, 20, and 30>

The method of claim 1, further comprising: the client using the URI and the schema in the advertisement to construct a gate for access to the service (column 7, lines 34-44).

Since all the limitations of the invention as set forth in claims 1-5, 7-15, 17-25, and 27-30 were disclosed by Beck, claims 1-5, 7-15, 17-25, and 27-30 are rejected.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 6, 16, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Official Notice. Pursuant to the applicant's previous request for documentary evidence and MPEP 2144.03, the use of Official Notice was previously supported by and is herein supported by Roberts et al. (U.S. Patent Number 6,560,633), hereinafter referred to as Roberts, and thus the rejection has been previously and is now maintained.

13. Beck disclosed a service framework for computing devices that allows devices to discover, advertise, and use services on a network. In an analogous art, Roberts disclosed a method for creating and invoking web services on a network.

14. Concerning claims 6, 16, and 26, Beck did not explicitly state a data representation language that comprises XML. However, Roberts does explicitly disclose this feature as his system is focused on generating and utilizing XML documents in order to implement web services on a network. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Beck by adding the ability to use a data representation language that comprises XML as provided by Roberts. Here the combination satisfies the need for a more efficient approach to service discovery that uses more efficient methods of describing and loading services. See Beck, column 1, lines 37-43.

15. Thereby, the combination of Beck and Roberts discloses:

- <Claims 6, 16, and 26>

The method of claim 5, wherein the data representation language comprises extensible Markup Language (XML) (Roberts, column 4, line 50 through column 5, line 7).

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Since the combination of Beck and Roberts discloses all of the above limitations, claims 6, 16, and 26 are rejected.

Response to Arguments

16. In the remarks, the applicant has argued:

- <Argument 1>

Beck does not disclose all of the features of claim 1 and like claims because he does not disclose “a client reading an advertisement from a space” as recited in the claims.

- <Argument 2>

Beck does not disclose all of the features of claim 1 and like claims because he does not disclose “wherein the advertisement comprises a schema, wherein the schema specifies one or more messages” as recited in the claims.

- <Argument 3>

Beck does not disclose all of the features of claims 4, 5, and like claims because he does not disclose a schema or a message “expressed in a data representation language” as recited in the claims.

- <Argument 4>

Beck does not disclose all of the features of claim 10 and like claims because he does not disclose “the client using the URI and the schema in the advertisement to construct a gate for access to the service” as recited in the claims.

- <Argument 5>

The combination of Beck and Official Notice does not disclose all of the features of claim 6 and like claims because it does not disclose “wherein the data representation language comprises eXtensible Markup Language (XML)” as recited in the claims.

17. In response to argument 1, it is maintained that Beck does disclose a client reading an advertisement from a space. The rejection clearly sets forth Beck’s service descriptor as an advertisement read from a space (previously cited column 6, lines 1-16). In Beck’s system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client reads a matched service descriptor in order to ascertain whether the service needs to be loaded and also in order to download the service functionality. This clearly meets the limitation of reading an advertisement from a space. Furthermore, in an alternate embodiment, Beck discusses discovery of services and teaches “To discover services, the service user needs to receive service descriptors multicasted over the ad-hoc network by other devices.” This would also satisfy the limitation of reading an advertisement from a space. Beck goes on to state that “discovering a service involves loading only a service descriptor, not loading the code that implements the service.” See column 4, line 61 through column 5, line 37. The applicant has stated that “A client supplying a description of a requested client and, in return, receiving a reference to a service adaptor, does not disclose a client reading an advertisement from a space, as recited in Applicants’ claim.” First, it is noted that it is believed that the applicant means to say “a client supplying a description of a requested service” as this is what Beck teaches. Second, this does in fact disclose a client reading an advertisement from a space. A client which can request a particular service, the request being returned with a reference to the service adapter

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as well as the request being fulfilled by the downloading of the service interface, adapter, and implementation, meets the limitation of “a client reading an advertisement from a space.” The client reads the service descriptor in order to determine whether the service functionality should be downloaded.

18. In response to argument 2, it is maintained that Beck does disclose an advertisement comprising a schema, wherein the schema specifies one or more messages. The rejection clearly sets forth an enhanced service descriptor that contains information about the service, including the service name, a description, and a location of code (previously cited column 4, lines 40-60). In Beck’s system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client uses a matched service descriptor to download the service functionality. This download includes the service interface, the service adapter, and the service implementation which clearly effectuate the functions of the service. This clearly meets the limitation of an advertisement comprising a schema, wherein the schema specifies one or more messages usable to invoke one or more functions of the service. The service descriptor clearly includes code to allow data transfer between the client and service which effectuates download of service functionalities and thus is “usable to invoke one or more functions of the service”. See previously cited column 6, lines 1-16. As the applicant stated in the appeal brief filed 3/13/2006, “Beck describes a Java interface for the service that ‘defines the set of operations that the service can perform on behalf of a client.’” Again, as the reading of a service descriptor leads to the downloading of this interface, the service descriptor contains code for data transfer that is “usable to invoke one or more functions of the service.”

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19. In response to argument 3, it is maintained that Beck does disclose a schema and a message expressed in a data representation language. The rejection clearly sets forth Beck's use of a Java interface and Java classes (previously cited column 5, lines 46-61). The applicant has argued that "a Java interface is not a schema expressed in a data representation language," but has failed to provide any basis for this conjecture. In fact, Java does satisfy the limitation of a data representation language in the claims. A data representation language is not further defined or explained in the claims so as to be distinguished over the Java programming language. The applicant's statements that it is well known in the art that Java interfaces do not include code expressed in a data representation language are not persuasive as Java abstracts the data on bytecodes so that when applications are developed the same code may run in different environments. Java utilizes such tools as Java classes and JAR files (which include metadata) in data representation. Again, the use of Java-based schema and messages meet the limitations in question.

20. In response to argument 4, it is maintained that Beck does disclose the client using the URI and the schema in the advertisement to construct a gate for access to the service. The rejection clearly sets forth Beck's construction of a gate for access to the service as it cites the use of the service implementation at either side or both sides of the data transfer (previously cited column 7, lines 34-44). As discussed above, in Beck's system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client uses a matched service descriptor to download the service functionality. This download includes the service interface, the service adapter, and the service implementation which clearly effectuate the functions of the service. See previously cited column 6, lines 1-16. This clearly meets the

limitation of using the advertisement to construct a gate for access to the service. Furthermore, it is again noted that an enhanced service descriptor contains a URL that is used to access the service. See previously cited column 4, lines 40-60.

21. In response to argument 5, it is maintained that the combination of Beck and Roberts does disclose the data representation language comprising XML. The applicant's arguments are not persuasive as they do not take into consideration the combination of Beck and Roberts or the line citations provided in the rejection.

22. In addition, the applicant has argued that claims rejected under 35 U.S.C. 102 and 35 U.S.C. 103, but not explicitly discussed, are allowable based on the above arguments. Thus, claims disclosing similar limitations to the discussed claims and related dependent claims remain rejected under the same reasoning as presented above.

Conclusion

23. **THIS ACTION IS MADE FINAL.** The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

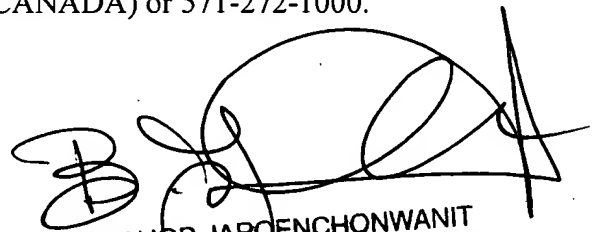
The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Lesniewski
Patent Examiner
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